

#### west virginia department of environmental protection

Office of Oil and Gas 601 57<sup>th</sup> Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

www.dep.wv.gov

WELL WORK PERMIT

Re: Permit approval for

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

Chief

Operator's Well Number: Farm Name: U.S. WELL NUMBER:

Date Issued:

Promoting a healthy environment.

API Number:								
47	1	0	3	0	2	9	0	5

## **PERMIT CONDITIONS**

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

#### **CONDITIONS**

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API N	umb	er:				
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## **PERMIT CONDITIONS**

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

WW-6B (04/15)

API NO. 47-103	- 02905	
OPERATOR W	VELL NO. SMITH 3H	
Well Pad Na	те: мпн	

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION. OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

I) Well Operator:	EQT Produc	tion Company	306686	Wetzel	Magnolia	New Martinsville
			Operator ID	County	District	Quadrangle
2) Operator's Well	Number: SM	ITH 3H	Well Pa	d Name: SM	IITH	
3) Farm Name/Surf	face Owner: 5	Smith, Sonny & Ch	parlotte Public Roa	ad Access: V	Vetzel County	Route 22
4) Elevation, currer	nt ground: _1	1321 E	levation, proposed	post-constru	ction: 1321	
5) Well Type (a) Oth	Gas <u>x</u> her	Oil	Und	erground Sto	rage	
(b)	If Gas Shal	low x	Dеер	-		
6) Existing Pad: Ye		izontal ×				Dn H
7) Proposed Target Marcellus, 6,701'			ipated Thickness	and Expected	Pressure(s):	10-7-17
8) Proposed Total V	Vertical Depth	ı: 6,701'				
9) Formation at Tot	tal Vertical De	epth: Marcellus	s			
10) Proposed Total	Measured De	epth: 10,782'				
l I) Proposed Horiz	ontal Leg Ler	ngth: 3,411'				
12) Approximate F	resh Water St	rata Depths:	100			
13) Method to Dete 14) Approximate S		•	Noticeable flow for	rom flowline	or when havi	ng to start soaping
15) Approximate C	Coal Seam Dep	oths: 1,018				
16) Approximate D	epth to Possil	ble Void (coal m	ine, karst, other):	None Antici	pated	
17) Does Proposed directly overlying o			ms Yes	1	No X	
(a) If Yes, provide	e Mine Info:	Name:		_		
-		Depth:				
		Seam:				DECEMEN
		Owner:				Office of Oil and

OCT 11 2017

WV Department of Environmental Protection Page 1 of 3

WW-6B
(04/15)

API NO. 47- 103 -	02905
<b>OPERATOR WELL</b>	NO. SMITH 3H
Well Pad Name:	SMITH

18)

#### **CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	LS	94.1	90'	90'	40- CTS
Fresh Water	13.375"	New	J55	54.5	1,329'KB-1314'GL	1,329'KB-1314'GL	1,140- CTS
Coal	13.375"	New	J55	54.5	1,329'KB-1314'GL	1,329'KB-1314'GL	1,140- CTS
Intermediate	9.625"	New	J55	36.0	2571'	2571'	643Lead - 377Tall CTS
Production	5.5"	New	P110	20.0	10,762'	10,762'	422 Lead - 2341 Tail CTS
Tubing	2.375"	New	J55	4.7		6,500'	N/A
Liners	N/A						

10-3-17

TYPE		117-111	Wall	<b>D</b> . D	Anticipated	Τ	Cement
	Size (in)	Wellbore Diameter (in)	Thickness (in)	Burst Pressure (psi)	Max. Internal Pressure (psi)	Cement Type	Yield (cu. ft./k)
Conductor	20"	24"	0.375"	N/A	17 psi	Type 1	1.18
Fresh Water	13.375"	17.5"	0.380"	2,730 psi	2160 psi	Class A	1.20
Coal	13.375"	17.5"	0.380"	2,730 psi	2160 psi	Class A	
Intermediate	9.625"	12.25"	0.352"	3,520 psi	2814 psi	Class A	
Production	5.5"	8.75"	0.361"	12,360 psi	10112 psi	Class A	
Tubing	2.375"	N/A	0.190"	7,700 psi	•	N/A	N/A
Liners							, ,,,,

#### **PACKERS**

Kind:	:		
Sizes:			
Depths Set:			

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Office of Oil and Gas

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WW-6B	
(10/14)	

۱۹	NO. 47-	103	- 02905	
	<b>OPERAT</b>	OR W	FII NO	SMITH

Well	Pad	Name:	SMITH

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Well has been drilled to TD, propose to perforate and fracture the Marcellus and turn in to production.

DMH 10-7-17

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 400,000 pounds of sand per stage.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): no additional
- 22) Area to be disturbed for well pad only, less access road (acres): no additional
- 23) Describe centralizer placement for each casing string:

Surface casing had bow spring centralizers placed on joints 28 and 30. Intermediate casing had bow spring centralizers placed on joints 4, 8, 12, 16, 20, 24, 28, 32, 37, 41, 45, 49, 53 and 57. Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 188. Ran a total of 48 rigid spiral centralizers. Ran bow spring centralizers from joint 196 to joint 244 on every eighth joint. A total of 7 bow spring centralizers were run.

24) Describe all cement additives associated with each cement type:

Fresh water/coal string will be cemented using a sturry of Class A cement with 0.10 (b/sx Cello flake, 0.20% BWOB Anti-foam, and 1.0% BWOB CaCl2. Intermediate string will be cemented using a lead and tail sturry; Lead is Class A cement with 0.20 gps accelerator, 0.07 gps dispersant, 0.10 gps Anti-Foam, 4.0% BWOB Expanding Agent, and 0.50% BWOB Gas Control Agent. Tail is Class A Cement with 1.0% BWOB CaCl2, 0.1 (b/sx Cello-Flake, and 0.2% BWOB Anti-Foam. Production string will be cemented using a Lead and Tail Sturry; Lead is Class A cement with 0.10 gps dispersant, 0.10 gps Anti-foam, 0.05 gps Retarder, 4.0% BWOB Expanding Agent, and 0.50% BWOB Gas Control Agent. Tail is Class A cement with 0.90% BWOB Dispersant, 0.30% BWOB Fluid loss, 0.20% BWOB Anti-Foam, and 0.60% BWOB Retarder.

25) Proposed borehole conditioning procedures:

Fresh Water/Coal section will be done by circulating air through the drill string at TD between 30 and 60 minutes or until the well bore is clean of cuttings.

Intermediate section will be done by circulating air and/or stiff foam through the drill string at TD between 30 and 120 minutes or until the well bore is clear of cuttings.

Production section will be done by circulating drilling fluid through the drill string at TD between 60 to RECE VED 720 minutes until the shakers are clear of cuttings and drill string pulls free of bottom.

Office of Off and Gas

\*Note: Attach additional sheets as needed.

OCT 1 2017

#### STONE ENERGY - PROPOSED HORIZONTAL

Permit Number: 47-103-0 Permit Issued:

Revision: 15-Mar-13

As Built Ground Elevation: 1321' Kelly Bushing: 18'

Location: Surface: North = 4,388,548 Enst = 516,227 (UTM NAD 83)
PBHL: North = 4,389,587 Enst = 515,320 (UTM NAD 83)
PTO: 11300' MD / 6690' TVD

Rig: Spud Date: TD Date:

			u	Date
Rig	Rel	985	9	Date

HOLE DEV.	CASING & CEMENTING DATA DIRECTIONAL DATA FLUID TYPE		WELLBORE DIAGRAM				PILOT HOLE FORMATION TOPS	
Vertica		CONDUCTOR PIPE	JIII IIIL	(B (22' BGL)		24" Hole then Driven		
		20" x 3/8" wall L/S PE @ 40' (set in bedrock & grouted to surface)	7111 1111		Shallowest FW			
	Air / Mist		311 116		Pittsburgh Coal	7-1/2" Hole		
75-9/		SURFACE CASING		1280' TVD	Deepest FW			
Vertica		13-3/8" 54,5# J-55 STC @ 1280" MD/TVD	-11 14	1200 170				
		Set through fresh water zones		1740' TVD	Salt Water			
		Set through coal zones	11 16	2187 TVD				
	Stiff Foam	Cemented to surface	31 16	2217 TVD		2-1/4" Hole		
	Gui rouii			2317" TVD	Big Injun Sandstone			
			11 16	2417" TVD	Base of Big Injun			
Vertica		INTERMEDIATE CASING	31 IE	2600' TVD				
		9-5/8" 36.0# J-55 LTC @ 2600' MD/TVD						
		Set through potential salt water zones		2787" TVD	Berea Sandstone			
		Set below base of Big Injun	1 1	-				
		Cemented to surface	1 1	3037' TVD	Gordon Sandstone			
			1 1					
			1 1					
	Air / Dust		1 1			3/4" Hole		
	Air / Dust		1 1					
			11					
	·	P @ \$971' TVD	KOF	_				
			1 1	8027 TVD	Rhinestreet Shelp			
	WBM	0.11	1 1	6380° TVD	Cashaqua Shale			
			1 1	6492" TVD	Middlesex Shale	3/4" Hole		
	In Gurve	NW A			127 1 201			
	In Curve	NWA.	1 1		West River Shale			
	In Curve	1-53-13 DWA	11	6511' TVD	Geneseo Shale			
	In Curve	4.53.13	11	6511' TVD 6577' TVD				
	In Curve	A-53-13 NWA	//	6511' TVD 6599' TVD	Geneseo Shale			
~90*	In Curve WBM in Lateral	4-53-13 NVA	/	6511' TVD 6577' TVD 6599' TVD 6637' TVD	Geneseo Shale Tully Limestone			
~90*	WBM in Lateral	4-53-13 NVA	/	6511' TVD 6577' TVD 6599' TVD 6637' TVD 6663' TVD	Geneseo Shale Tully Limestone Hamilton Shale Marcellus Shale	/4" Hole in Lateral		
~90*	WBM In Lateral  TD @ 11200' MD / 6690' TVD		/	6511' TVD 6577' TVD 6599' TVD 6637' TVD 6663' TVD	Geneseo Shale Tully Limestone Hamilton Shale			
~90*	WBM in Lateral	U/N 0 123-13	/	6511' TVD 6577' TVD 6599' TVD 6637' TVD 6663' TVD	Geneseo Shale Tully Limestone Hamilton Shale Marcellus Shale			

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Environmental Protection WV Department of

#### STONE ENERGY - AS DRILLED TOP HOLE with SLANT

Revision: 16-Jul-14

Well: Smith #3H TOP HOLE (AFE# 2014-0003T)
State: West Virginia
County: Wetzel
District: Magnolia

(AFE# 2014-0003T)
Permit Number: 47-103-02905
Permit Issued: 7/31/2013
Ground Elevation: Kelly Bushing: 15'

Prospect: Mary Rig: NOMAC Rig #237

Location: Surface: (N) 420,271' (E) 1,630,829' State Plane WV North NAD 27 Spud Date: 11/17/2013 PBHL: (N) 420,267' (E) 1,630,342' State Plane WV North NAD 27 TD Date: 11/24/2013

PBHL: (N) 420,267' (E) 1,630,342' State Plane WV North NAD 27 TD Date: 11/24/2013
PTD: 5808' MD / 5765' TVD Rig Release Date: 11/24/2013

HOLE SIZE					MW & TYPE	HOLE DEV.
Pre-Set Conductor	90' K	B (75' BGL)		CONDUCTOR PIPE		Vert
17-1/2" Hole (Hammer)	Shallowest FW Pittsburgh Coal Deepest FW	100' TVD 1018' TVD 1023' TVD 1329'		20" @ 90' (set in bedrock & 9-5/8" TAM CAP Packer @ SURFACE CASING	0 1194' MD/TVD Air / Mist	0.3°
12-1/4" Hole (Rock Bit)	RED BEDS Little Lime Salt Water Big Lime Big Injun			13-3/8" 54.5# J-55 STC @ Set through fresh wa Do not set deeper th Cemented to surface	iter and coal zor an ground eleva	ies
	Base of Big Injun	2393' TVD 2571'		INTERMEDIATE CASING	Stiff Foam	0.4°
8-3/4" Hole	Berea	2762' TVD		9-5/8" 36.0# J-55 LTC @ 2 Set through potentia Set below base of Bi Cemented to surface	l salt water zone ig Injun	s
Slant (Hammer)	Gordon	2983' TVD		Performed SLANT due to anti-	-collision conc	erns:
8-3/4" Hole to KOP (Hammer)						
		5765' TVD	_ []_		Air / Dust	11.1°
	Rhinestreet Base	6360' TVD		P HOLE TD @ 5808' MD / 5765 (~247' above planned KOP)	RECE Office of O	EIVED
	Middlesex	6517' TVD			- UI C	and e
	West River	6534' TVD			SEDE	
	Geneseo Shale	6731' TVD			SEP 2	
	The state of the s	07041 THO				
	Tully LS	6761' TVD			WWW.	
	Tully LS Hamilton Shale	6786' TVD		En	VVV Depar	tment -
				Env	WV Depar vironmenta	tment o

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# State of West Virginia Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

Oį	RECEI Fice of Oil	VED
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				TIVITA	~ CDara	
API 47 - 103 - 02905			strict Magnol	lia "'Or	r Departn nmental p	Pent of
Quad New Martinsville	Pad Name Smith		eld/Pool Name			rotection
Farm name Smith, Sonny and		W	ell Number <u>#</u>	3H		
Operator (as registered with the C						
Address 1300 Fort Pierpont D	or Suite 201 City Mo	rgantown	State W	Z	Zip <u>26508</u>	
As Drilled location NAD 83/U Top hole	Northing 4,388,548		516,227	y		_
Landing Point of Curve	Northing 4,388,694		515,832			
Bottom Hole	Northing <u>4,388,588</u>	Easting	515,322			_
Elevation (ft) 1,321	GL Type of Well	□New <b>E</b> Existing	Type of Rep	ort aInter	im □Final	
Permit Type   Deviated    Deviated   Deviated   Deviated   Deviated   Deviated   Deviated   Deviated   Deviated   Deviated   Deviated   Deviated   Deviate	Horizontal 🖪 Horizon	ntal 6A 🛘 Vertical	Depth Type	: De	eep ■ Sh	allow
Type of Operation □ Convert	□ Deepen □ Drill □	Plug Back 🛮 🗆 Redrillin	g 🗆 Rewor	rk 🗂 Stin	nulate	
Well Type □ Brine Disposal □	CRM ■ Gas □ Oil □ Sec	condary Recovery G Solut	ion Mining	Storage	□ Other	
		condary recovery bonds				
		•	_	_		
Type of Completion ■ Single □		•	⊃NGL □Oi	_	er	_
	Multiple Fluids Produ	•	_	_		_
Type of Completion   Single	Multiple Fluids Produ y	aced □ Brine □Gas c	o ⊃NGL ⊡Oi	il 🗆 Othe	er	-
Type of Completion ■ Single □ Drilled with □ Cable ■ Rotar	n Multiple Fluids Produ 'Y ¶ Air □ Mud ¶Fresh Wa	aced □ Brine □Gas c	o ⊃NGL ⊡Oi	il 🗆 Othe	er	-
Type of Completion ■ Single □ Drilled with □ Cable ■ Rotan Drilling Media Surface hole	n Multiple Fluids Produ 'Y ¶ Air □ Mud ¶Fresh Wa	aced □ Brine □Gas c	o ⊃NGL ⊡Oi	il 🗆 Othe	er	-
Type of Completion Single Drilled with Cable Rotar  Drilling Media Surface hole Production hole Air Mud	Multiple Fluids Produ 'Y Air   Mud	aced □ Brine □Gas of the later	o ongL ooi	il □ Othe	eresh Water □	Brine
Type of Completion Single Drilled with Cable Rotar  Drilling Media Surface hole Production hole Air Mud  Mud Type(s) and Additive(s)	Multiple Fluids Produ y Air □ Mud ■Fresh Wa □ Fresh Water □ Brind cludes Caustic Soda, Ba	aced □ Brine □Gas of the later	o ongL ooi	il □ Othe	eresh Water □	Brine
Type of Completion Single Drilled with Cable Rotar  Drilling Media Surface hole Production hole Air Mud  Mud Type(s) and Additive(s)  Saturated salt mud which ince  Soda Ash, and Sodium Chlo	Multiple Fluids Produ y Air	ater Intermediate hole e rite, Lime, New-Drill, Pe	□ NGL □ Oi e ■ Air □ N erma-Lose H	il □ Othe	esh Water □	Brine e 102,
Type of Completion Single Drilled with Cable Rotar Drilling Media Surface hole Production hole Air Mud Mud Type(s) and Additive(s) Saturated salt mud which incompared Soda Ash, and Sodium Chlo Date permit issued 7/31/201	Multiple Fluids Producy  Air	aced Brine Gas of the Brine Intermediate hole erite, Lime, New-Drill, Permenced 11/17/2013	□ NGL □ Oi e ■ Air □ M erma-Lose H Date drilli	il □ Othe	esh Water □ lex D, X-Cid	Brine e 102,
Type of Completion Single Drilled with Cable Rotar  Drilling Media Surface hole Production hole Air Mud  Mud Type(s) and Additive(s)  Saturated salt mud which incomo Soda Ash, and Sodium Chlor  Date permit issued 7/31/201  Date completion activities began	Multiple Fluids Producty  Air Mud Fresh Water Brinder  Rudes Caustic Soda, Barride  Date drilling community  Not Yet Completed	ater Intermediate hole e rite, Lime, New-Drill, Pe menced 11/17/2013 Date completion activiti	NGL Oi	il □ Othe	esh Water □ lex D, X-Cid	Brine e 102,
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Type of Completion Single Drilled with Cable Rotar  Drilling Media Surface hole Production hole Air Mud  Mud Type(s) and Additive(s)  Saturated salt mud which incomo Soda Ash, and Sodium Chlor  Date permit issued 7/31/202  Date completion activities began  Verbal plugging (Y/N) N  Please note: Operator is required  Freshwater depth(s) ft	Multiple Fluids Producy  Air Mud Fresh Water Brinde  Bludes Caustic Soda, Barride  Date drilling common Not Yet Completed  Date permission granter  to submit a plugging application  100  2,183  1,018	ater Intermediate hole e  rite, Lime, New-Drill, Permenced 11/17/2013  Date completion activities d	NGL Oi  Air NGL Oi  Air NGL Oi  Air NGL  Air NG  Air N	II □ Other	esh Water  lex D, X-Cid  7/28/20  pmpleted	Brine e 102,

WR-35 Rev. 8/23/13

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Page 2\_ of \_\_\_

ICV. 0/23/13										
API 47- 103	02905		Farm name	Smith, So	nny a	and Charlotte	€Well	number_#3H	<u> </u>	
CASING STRINGS	Hole Size	Casin Size	-	Depth	New Use			Basket Depth(s)		circulate (Y/N) letails below*
Conductor	24"		0"	90'	Ne		94.1 ppf	ocpui(3)	N - GTS	
Surface	17.5"			KB - 1,314' GL	Ne		54.5 ppf	122' & 203'		r-CTS
Coal	17.5"			KB - 1,314' GL	Ne		54.5 ppf	122' & 203'		7 - CTS
Intermediate 1	12.25"		25"	2,571'	Ne		- 36 ppf	122 0 203		7 - CTS
Intermediate 2	12.20	9.0	23	2,371		300	- 30 ррі			-013
Intermediate 3		<u> </u>								
Production	8.75"		5"	10.762'	No	B110	20 and		N TOC	4 403l Calculated
Tubing	6.75	5.	5	10,762'	Ne	W PIIU	- 20 ppf		N - 10C@	1,493' Calculated
Packer type and d	lenth set	T414 04	D 1-0-4-1-1- D		4041 -					
		TAM CA	P Inflatable P	icker set @ 1	,194 0	on the 9.625" cas	sing string			
Comment Details	Circulated 14 bbls	cement to s	surface on 13.375	casing string. C	irculated	I 9 bbls cement to su	rface on the 9.62	5" casing string. Cit	culated 25 bbls	s TunedSpacer to
	casing string. TOC or					<del></del>				
		<u> </u>								
CEMENT	Cl		N1	CI		Vield	V1	O		WOC
CEMENT DATA	Class/Type of Cement		Number of Sacks	Slurry wt (ppg		Yield ( ft ³/sks)	Volume ( <u>ft <sup>1</sup> )</u>	Cemen Top (M		WOC (hrs)
Conductor	Type 1		34	15.6		1.18	40	Surfac		24.0
Surface	Class "A"		950	15.6		1.20	1,140	Surfac	æ	8.0
Coal	Class "A"		950	15.6		1.20	1,140	Surfac	e	8.0
Intermediate I	Lead-10% Salt Tail-C		ad-502 Tail-3	-	i 15.6 L	ead-1.28 Tail-1.19	<u> </u>			12.0
ntermediate 2										12.0
Intermediate 3										
Production	Lead-TunedSpacer3 Tail	-VariCem I ea	ad-178 Tail-1 9	5 Lead- 14 5 Ta	il-15.2 I	.ead-2.37 Tail-1.21	Lead-422 Tail-2	341 1,493 calc	ulated	7.0
Tubing		200	34-110 1411-1,0	.0   5022   1112   12				1,100 00.00		7.0
			<del></del>	l		<u> </u>				·
Drillers TD (fl	10,782 MD / 6,70	1 TVD			Logg	ers TD (ft) NA	<b>\</b>			
Deepest forma	tion penetrated	Marcellus	Shale		Plug	back to (ft)				
Plug back pro	cedure				_					
Kick off denth	(ft) 6,060 MD / 6,0	13' TVD								
	. (10)									
Check all wire	line logs run	0	caliper [	density	∎d	leviated/directi	onal □ in	duction		
			-	resistivity		amma ray		mperature	□sonic	
				<b>,</b>						
37-11	Yes A No	C	Conventional	Sidew	all	w	ere cuttings	collected	Yes 🗆 N	Vo
weii corea 🗆										
well corea			LACEMENT	<b>USED FOR</b>			TRING Sun	ace casing had bow	spring central	zers placed on
DESCRIBE T	HE CENTRAL									
DESCRIBE T	ediate casing had bow sprin	g centralizers pl	laced on joints 4, 8, 12,				icid spiral centraliz	ers. Ran bow spring	centralizers from	
DESCRIBE T joints 28 and 30. Interme Production casing ha		g centralizers pt rs placed on e	laced on joints 4, 8, 12, every fourth joint be				igid spiral centraliz	ers. Ran bow spring	centralizers from	
DESCRIBE T joints 28 and 30. Interme Production casing ha	ediate casing had bow sprin d rigid spiral centralize	g centralizers pt rs placed on e	laced on joints 4, 8, 12, every fourth joint be				igid spiral centraliz		P.E	in joint 196 to joint 244
DESCRIBE T joints 28 and 30. Interme Production casing ha	ediate casing had bow sprin d rigid spiral centralize	g centralizers pt rs placed on e	laced on joints 4, 8, 12, every fourth joint be				igid spiral centraliz		P.E	n joint 196 to joint 244
DESCRIBE T joints 28 and 30. Interme Production casing ha on every eighth joint.	ediate casing had bow sprin d rigid spiral centralize	g centralizers pl rs placed on e g centralizers	laced on joints 4, 8, 12, every fourth joint be were run.		to joint 1				P.E	n joint 196 to joint 244
DESCRIBE T joints 28 and 30. Interme Production casing ha on every eighth joint.	ediate casing had bow sprin id rigid spiral centralize: A total of 7 bow sprin	g centralizers pl rs placed on e g centralizers	laced on joints 4, 8, 12, every fourth joint be were run.	inning with joint 1	to joint 1	88. Ran a total of 48 r			PiE Office c	DI OII and
DESCRIBE T joints 28 and 30. Interme Production cassing ha on every eighth joint.  WAS WELL (	ediate casing had bow sprin id rigid spiral centralizer A total of 7 bow sprin COMPLETED	g centralizers pl rs placed on e g centralizers AS SHO	laced on joints 4, 8, 12, every fourth joint be were run.	inning with joint 1	to joint 11	88. Ran a total of 48 r			PiE Office c	n joint 196 to joint 244
DESCRIBE T joints 28 and 30. Interme Production cassing ha on every eighth joint.  WAS WELL (	ediate casing had bow sprin id rigid spiral centralize: A total of 7 bow sprin	g centralizers pl rs placed on e g centralizers AS SHO	laced on joints 4, 8, 12, every fourth joint be were run.	inning with joint 1	to joint 11	88. Ran a total of 48 r		1	Office o	CEIVED of Oil and (
DESCRIBE T joints 28 and 30. Interme Production cassing ha on every eighth joint.  WAS WELL (	ediate casing had bow sprin id rigid spiral centralizer A total of 7 bow sprin COMPLETED	g centralizers pl rs placed on e g centralizers AS SHO	laced on joints 4, 8, 12, every fourth joint be were run.	inning with joint 1	to joint 11	88. Ran a total of 48 r		1	Office o	o joint 196 to joint 244 ECEIVED of Oil and (

Page 3\_ of \_\_\_

API 4	47- 103 - 02905	Farm nar	me_Smith, Sonny	and Charlotte	Well number_#3H					
	PERFORATION RECORD									
Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)					
			_							

Please insert additional pages as applicable.

#### STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
		·						_
						<u> </u>	<u> </u>	-
						-		
<u> </u>				<u> </u>				
							-	-
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L						<u> </u>	<u> </u>	

Please insert additional pages as applicable.

SEP 25 2017

WV Department of Environmental Projection WR-35 Rev. 8/23/13

4710302905 Page 4 of \_\_

API 47- 103	_ 02905	<u> </u>	Farm	name_	Smith, S	Sonny a	nd Charle	otte	Well :	number <u>#</u>	3H			
PRODUCING	<u>FORMAT</u>	ION(S)	)	DEPT	<u>HS</u>									
Not Yet Comple	ted					_ TVD			MD					
								·····						
Please insert ad	ditional pa	ages as	applicable.			_		<del></del>	_					
GAS TEST	□ Build u	p 🗆 I	Orawdown	□ Оре	en Flow		OIL TE	ST 🗆 l	Flow c	Pump				
SHUT-IN PRE	SSURE	Surfac	e	psi	Botto	m Hole		psi	DURAT	TION OF	TES	Т	hrs	<b>.</b>
OPEN FLOW	Gas		Oil		NGL				GAS N	(EASUR	ED B	Y		
LITHOLOGY/ FORMATION	TOP		BOTTOM		TOP	BOTTO		come i	OCV TVI	DE AND DE	·coni	2011	UTITY AND	
FORWATION	DEPTH II NAME T		DEPTH IN FT TVD		TH IN FT MD	DEPTH I						-	NTITYAND ., GAS, H₂S	
	0		· · · · · · · · · · · · · · · · · · ·		0									
See Attached Sheet	-													
			<u> </u>											
		1												
_ <del></del>													-	
				_				-						
Please insert ad	ditional pa	ages as	applicable.	.										
Drilling Contra	_			n Drilling	(horizon	ital)								
Address 2034 M					City		orris / The V	Voodland	s State	PA / TX	Zip	25312	/ 77381	
Logging Compa	Scient	tific Drilli	ing and Schl	lumbera	er .									
Logging Compa Address 124 Vis	ta Drive / 11	178 US H	WY 33 East		City	Charlero	i / Weston		State	PA/WV	Žip	15022	/ 26452	
					_ ~,						. — <b></b>			<del></del>
Cementing Con Address 1178 U	npany Scr S HWY 33 F	number( East	ger		City	Weston	-		State	w	7in	26452		
					_ City		-		State		. 2. p			<del></del>
Stimulating Co					<u> </u>		_		C. ·		·7·			
Address Please insert ad					City				_ State		Zip		DEC	)CI
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Completed by								ephone	304-225				100 OI	Oil and 2 5 2017
a					Title C	ompletions	∟ngineer			Date			A	~

## 4710302905

**EQT Production** 

**Hydraulic Fracturing Monitoring Plan** 

Pad ID: Smith

Wetzel County, WV

9/19/17

#### **Purpose**

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Wetzel County, WV prior to hydraulic fracturing at the following EQT wells on Smith pad: Smith 1H, Smith 3H

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation. A report is required to be submitted along with a well work permit application.

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include coordination with well operators of the timing and location of the hydraulic fracturing, establishment of measures well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

#### 1. Communications with Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known wells and well operators within 500 feet of this pad and the lateral sections that are known or could reasonably be expected to be within range of the fracture propagation. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

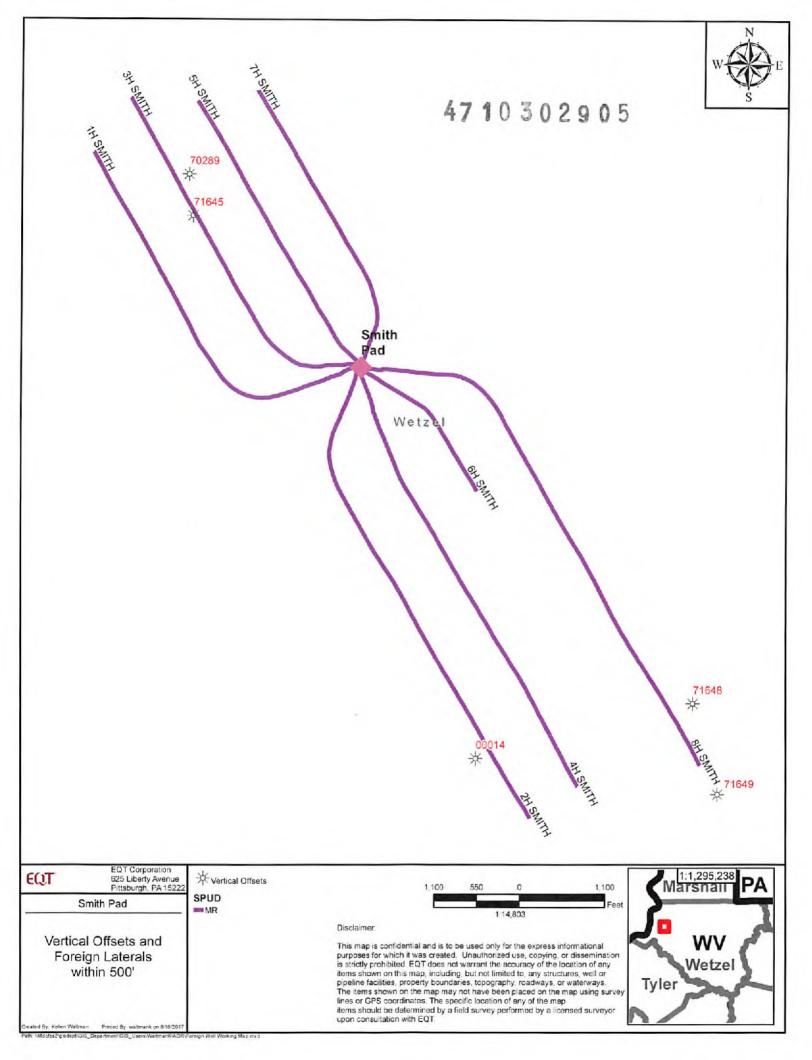
EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

EQT will recommend to these operators at a minimum to:

- Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
- 2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
- 3. Inspect or install master valves or other necessary equipment for wellhead integrity capable of a pressure recommended by EQT
- 4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified

#### 2. Reporting

EQT will provide information relating to the hydraulic fracturing schedule, communication with other operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.



47103716480000	47103716490000	47103716450000	8	47103702890000	
47103716480000 8/13/1925 UNKNOWN	UNKNOWN	UNKNOWN	12/1/1929 LEATHERWOOD INCORPORATED	UNKNOWN	Completion D Current Operator
888 GR			790 GR		Elevation
	GR UNKWN	GR UNKWN	GR D&A	GR PSEUDO	Elevation Elevation Refi Final Statu: Lat
D&A-OG 39.634591 -80.795796	39.631398		39.632704	PSEUDO 39.653169	tu:Lat
-80.795796	39.631398 -80.794669	39.651717 -80.818692	39.632704 -80.805742	-80.81888	Long
					Permit Date
6/29/1925 7/14/1925 HAMPSHIRE			11/1/1929		SPUD Date
HAMPSHIRE			10/17/1929 11/1/1929 BIG INJUN /SD/		Permit Date SPUD Date TD Formation N: Total Depth Permit
2842 71648	0 71649	0 71645	1926 00014	0 70289	il Depth Permit

## 4710302905

<b>API Number</b>	47 - 103	- 02905
One	rator's Well No	

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

#### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

LEGIDS COTTINGS DISTOSAL & RECLAMATION PLAN	
Operator Name EQT Production Company OP Code 306686	,
Watershed (HUC 10) Tributary of of Doolin Run Quadrangle New Martinsville	
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes	No
Will a pit be used? Yes No V	
If so, please describe anticipated pit waste:  Will a synthetic liner be used in the pit? Yes No If so, what ml.?	
Will a synthetic liner be used in the pit? Yes No If so, what ml.?	March State Control on Associate
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
Underground Injection (UIC Permit Number 0014, 8462, 4037	
Reuse (at API Number Various  Off Site Disposal (Supply form WW-9 for disposal location)	
Other (Explain	The Association of the Control of th
Will closed loop system be used? If so, describe:	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etcn/a	DWH
-If oil based, what type? Synthetic, petroleum, etc. n/a	
Additives to be used in drilling medium? n/a	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etcn/a	
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A	
-Landfill or offsite name/permit number? n/a	
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated we West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee where it was properly disposed.	aste rejected at any shall also disclose
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLU on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection provisions of the permit are enforceable by law. Violations of any term or condition of the general permit a law or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined and am familiar with the information form and all attachments thereto and that, based on my inquiry of those individuals immedobtaining the information, I believe that the information is true, accurate, and complete. I am aware the penalties for submitting false information, including the possibility of fine or imprisonment.  Company Official Signature  Company Official Title Regional Land Supervisor	n. I understand that the and/or other applicable ation submitted on this diately responsible for
Subscribed and sworn before me this 2 day of Sptemble , 20 17	RECEIVED Office of Oil and Gas
Kellece & Wanstrock Notary Public	OCT 1 1 2017
My commission expires 4-7-2020	OCT 11 2017
	WV Department of Environmental Protection

## 47 10302905

Form WW-9

Proposed Revegetation Treat			
1 ima 3	tment: Acres Disturbed	no additional Prevegetation pH	
Lune <u>~</u>	Tons/acre or to corre	ect to pH 6.5	
Fertilizer type Gra	anular 10-20-20		
Fertilizer amount_1	1/3	lbs/acre	
Mulch 2		_Tons/acre	
		Seed Mixtures	
Te	emporary .	Perma	nent .
Seed Type KY-31	lbs/acre 40	Seed Type	lbs/acre
		Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		
Photocopied section of invol			
	lved 7.5' topographic sheet	•	
And Affilia (Ananches) and a description of the contraction of the con	*****		
Plan Approved by:	<i>n</i> ,		
Plan Approved by:	<i>n</i> ,		
Plan Approved by:	<i>n</i> ,		
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Plan Approved by:	<i>n</i> ,		
Plan Approved by:	<i>n</i> ,		
Plan Approved by:	<i>n</i> ,		

OCT 11 2017

API No. 47 -	103	-02905
Operator's Well	No.	SMITH #3H

## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

## CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name	STON	E ENERGY CORPO	DRATION	OP Code	494490923	_
Watershed	Tributary of	Doolin Run	Quadrangle _	New	Martinsville	_
Elevation	1,335'	County	Wetzel	District	Magnolia	_
	cipated Pit Waste:		re will not be a waste p			_
Do you anticipate i	using more than 5,0	00 bbls of water to	complete the proposed	well work? Yes	✓ No	
Will a synthetic lin	er be used in the pi	t?N/A	If so, what mil.?	N/A	_	
Proposed Disposal	Method For Treate Land Appli	cation				
<u> </u>					34-121-24037, 34-121-240	86)
-			ack will be stored in tanks a		vell sites	_)
-	Other (Exp		n WW-9 for disposal lo	cation)		
-If oil base		thetic, petroleum, et		ection: Air and Drilling	Soap, Curve and Lateral: Brind	e fluid
			tal drilling rigs will incorpora	te the use of a close	d loop system	- DWH
			oved offsite, etc. Appro			4-23-13
			ill be used? Cement, li			_
-Landfill o	or offsite name/pern	nit number? Wetzel	County Sanitary Landfill (St	WF-1021/WV010918	5)	
provisions of the poor regulation can le I certify to application form and the information, I	ermit are enforceab ad to enforcement a under penalty of la ad all attachments to believe that the information, including	le by law. Violation action. aw that I have pers hereto and that, base formation is true, a	ns of any term or condi- conally examined and ed on my inquiry of the	tion of the general am familiar with ose individuals im	al Protection. I underst I permit and/or other app the information submit mediately responsible for t there are significant p	plicable law tted on this or obtaining
Company Official (			Timothy P. M	//dcGregor		
Company Official 1			Land Coo	dinator		
					298	
Subscribed and swo	orn before me this_	173 day	of april	, 20 1	0 %	ECEIVED
Llevel	li (1) X	Inocluly		Notary Pi	iblic Office	ECEIVED of Oil and Gas
My commission ex	pires 5/18/2	021	mummy	OFFICIAL SEAL	wy SE	P 2 5 2017
			DA RR2 B	NOTARY PUBLIC TATE OF WEST VIRGII NIELLE L SNODE ox 248A, Fairmont, W nmission Expires May	NIA & WY Ma	partment of ental Protection

Property Boundary	Diversion
Road ===========	Spring
Existing Fence ———————————————————————————————————	Wet Spot
Planned Fence	Drain Pipe W size in inches
Stream	
Open Ditch	Waterway
Rock	Cross Drain
<b>↑</b>	Artificial Filter Strip XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
North N	Pit: Cut Walls
Buildings	Pit: Compacted Fill Walls
Water Wells W	Area for Land Application
Drill Sites	of Ph Waste
Proposed Revegetation Treatment: Acres Disturbed 14.2  Lime 2.0 Tons/acre or to correct to pH	1 love genation pri
Lime Z.0 Tons/acre or to correct to pH	
Fertilizer (10-20-20 or equivalent)500 - 750lbs/acre	(500 lbs minimum)
Mulch 0.50 to 0.75 TPA + Straw Tons/acre	
Seed Mi	xtures
Area I	Area II
Seed Type lbs/acre	Seed Type lbs/acre
Marcellus Mix 100.0	Marcellus Mix 100.0
White or Ladino Clover 10.0	White or Ladino Clover 10.0
Orchard Grass 40.0	Orchard Grass 40.0
Winter Rye 50.0	Winter Rye 50.0
Attach: Drawing(s) of road, location,pit and proposed area for land application	on.
Photocopied section of involved 7.5' topographic sheet.	
Plan Approved by:	
Comments:	· ad
	Office of Oil & Gas
<b>A.</b> 1	ate: 4-23-17 Office of PECEIVED
Title: 1 + 6c5 1 spech D	nate: 4-23-12
Field Reviewed? () Yes () N	lo and Gas
	SEP 25 2017
	MA: rs
	WV Department of Environmental B
	Environmental Protection.



#### WW-9 ADDENDUM

#### **Drilling Medium Anticipated for This well**

- Vertical section of well bore, down to KOP, will be drilled on air and/or a combination of air and drilling soap.
- From KOP through the curve section and horizontal section of well bore will be drilled on a brine-water based mud system.

#### Additives to be Used While Drilling

- Common additives when air drilling: KCl (CAS No. 1302-78-9 & 14808-60-7), soda ash (CAS No. 497-19-8), shale stabilizer (CAS No. 67-48-1 & 7732-1835), drilling soap (CAS No. 111-76-2), air hammer/motor lubricant.
- Common water based additives for mud drilling: NaCl (CAS No. 7647-14-5), KCl (CAS No. 7447-40-7), barite (CAS No. 13462-86-7 & 14808-60-7), starch (CAS No. 9005-25-8), PAC (CAS No. 9004-32-4), xanthum gum (CAS No. 11138-66-2), PHPA (CAS No. 64742-47-8), polysaccharide (CAS No. 11138-66-2), sulfonated asphaltic material (CAS No. 269-212-0 & 238-878-4), aluminum silicate (CAS No. 37287-16-4), gilsonite (CAS No. 12002-43-6), graphite (CAS No.14808-60-7 & 7782-42-5), shale stabilizer (CAS No. 67-48-1 & 7732-18-5), fluid loss control polymers (CAS No. 9004-34-6), viscosity control polymers (CAS No. 11138-66-2 & 107-22-2), soda ash (CAS No. 497-19-8), sodium bicarbonate (CAS No. 144-55-8), NaOH (CAS No. 1310-73-2, 7647-14-5, & 7732-18-5), lime (CAS No. 1305-62-0), gypsum (CAS No.778-18-9), citric acid (CAS No. 77-92-9), biocide (CAS No. 52-51-7 or 7732-18-5 + 67-56-1 + 141-43-5), CaCO<sub>3</sub> (CAS No. 471-34-1), cellulose fibers (CAS No. 14808-60-7), nut plug (CAS No. 9004-34-6 & 14808-60-7), cross-linking polymers (CAS No. 107-22-2 & 11138-66-2), other LCMs, surfactants (CAS No. 64-17-5), ROP enhancer/lubricant (CAS No. 8002-13-9), beads, corrosion inhibitor (CAS No. 7732-18-5), aluminum stearate (CAS No. 300-92-5), defoamer (CAS No. 246-771-9).

MSDS are available upon request.

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#### WW-9 ADDENDUM

#### **Drill Cuttings Disposal Method**

Closed loop drilling system will be incorporated. No waste pits will be constructed. All
drill cuttings are put through a drier system and hauled to and disposed of at approved
and permitted landfills.

#### Landfills or Offsite Names and Permit Numbers

Wetzel County Sanitary Landfill Rt. 1, Box 156A New Martinsville, WV 26155 SWF-1021 / WV01909185

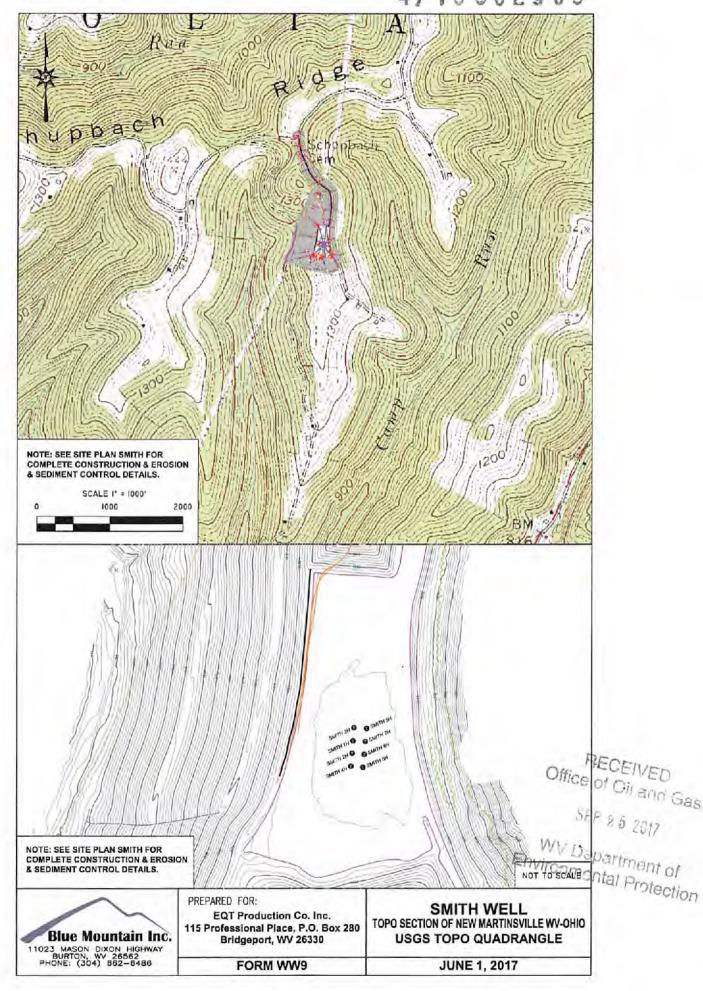
Brooke County Sanitary Landfill Colliers, WV 26035 SWF-1013 / WV0109029

Dmlt 4-23-13

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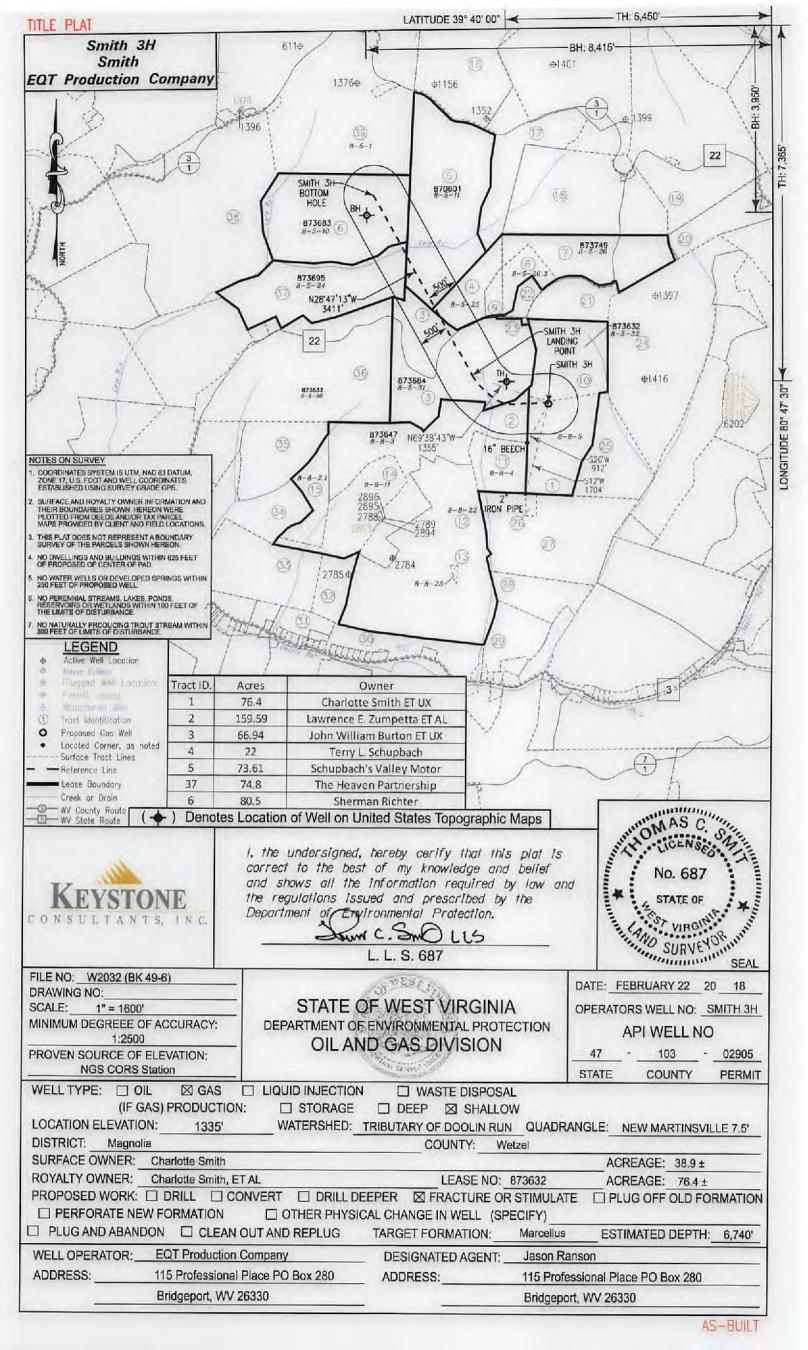
# Site Specific Safety Plan

# EQT Smith Pad New Martinsville Wetzel County, WV

Smith BH	For Wells:	
Date Prepared: June 19, 2017	WV Oil and Gas Inspe	ector
Megicand Ton Supe	Oil +Gr Ing	net
9-20-17 Date	/0-7-17 Date	R

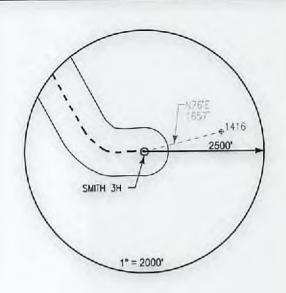
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#### Smith 3H Smith **EQT Production Company**

Tract ID.	Tax Map No.	Parcel No.		District	Surface Tract Owner	Acres
1	8	5	-	Magnolia	Charlotte Smith	38.9
2	8	3	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	72.86
3	5	31	Wetzel	Magnolia	John William Burton	66.56
4	5	25	Wetzel	Magnolia	Stone Energy Corporation	17.54
5	5	11	Wetzel	Magnolia	Ronald L. Schupbach	89.45
6	5	10	Wetzel	Magnolia	Herman L. & Sherman Richter	80.66
7	5	26	Wetzel	Magnolia	Stone Energy Corporation	39.95
8	5	26.3	Wetzel	Magnolia	Stone Energy Corporation	10.95
9	5	25.1	Wetzel	Magnolia	Stone Energy Corporation	4.19
10	5	32	Wetzel	Magnolia	Charlotte Smith	37.5
11	8	4	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	15.28
12	8	22	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	107,5
13	8	23	Wetzel	Magnolia	Lawrence E. Zumpetta ETAL	0.27
14	В	11	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	36.86
15	8	2.1	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	18.15
16	5	1	Wetzel	Magnolia	Ronald L Schupbach	90.3
17	5	12	-	Magnolia	Melvin E. & Wilda G. Schupbach	36.8
18	5	19	-	Magnolia	Ronald L. & Monette Schupbach	68.49
19	5	16	Wetzel	Magnolia	Sharon L. Bearce	108.6
20	5	22	-	Magnolia	Sharon L. Bearce	37.5
21	5	26.2		Magnolia	Franklin Ray Blake	17.73
22	5	26.1	1	Magnolia	Stone Energy Corporation	3.93
23	5	31.1		Magnolia	Schupbach Cemetery	0.27
24	5	33	-	Magnolia	Franklin Ray Blake	108.4
25	8	6	-	Magnolia	Kocher Albert HRS	33.0
26	8	12.1	-	Magnolia	Ralph Oscar & Jonee Kay Smith	1.23
27	8	12		Magnolia	David L. & Ralph O. Smith	58.1
28	8	24	_	Magnolia	Gary W. & Linda J. Durig	18.3
29	8	54.1	-	Magnolia	Gary W. & Linda J. Durig	22.4
30	8	62	-	Magnolia	Gary W. & Linda J. Durig	57.15
31	8	38.2	-	Magnolia	George R. Mullett	8.28
32	8	21	-	Magnolia	Michael L. Mullett	12.2
33	8	20	-	Magnolia	Billy Darrell Morris	54.6
34	8	10	-	Magnolia	Myron H. Helmick	35.5
35	8	2	_	Magnolia	J W Schamp EST	37.5
36	5	30	-	Magnolia	Wayne A. & Virginia L. Schupbach	93.83
37	5	24	-	Magnolia	Heaven Partnership	53.5
38	5	8	-	Magnolia	George E. & Beth Ann Heinzman	141.4
39	5	1	_	Magnolia	Mark Edwin Scheibelhood	327.6



Notes:
SMITH 3H As-Built coordinates are
NAD 27 N: 420,271.000 E: 1,630,829.000
NAD 27 Lat: 39.646491 Long: -80.811055 NAD 83 UTM N: 4,388,548.063 E: 516,226.569

SMITH 3H As-Built Landing Point coordinates are NAD 27 N: 420,742.460 E: 1,629,558,280 NAD 27 Lat: 39.647734 Long: -80.815592 NAD 83 UTM N: 4,388,685,222 E: 515,837.040

SMITH 3H As-Built Bottom Hole coordinates are NAD 27 N: 423,731,640 E: 1,627,915,770 NAD 27 Lat 39,655874 Long: -80,821581 NAD 83 UTM N: 4,389,587,528 E: 515,321,460

West Virginia Coordinates system of 1927 (North Zone) West Virginia Coordinates system of 1927 (North Zone) based upon Differential GPS Measurements Plat orientation, Corner and well ties are based upon the grid north meridian.

Well location references are based upon the grid north meridian.

UTM coordinates are NAD83, Zone 17, Meters.

#### LEGEND

- Active Well Location
- Proposed Gas Well 0
- Located Corner, as noted Surface Tract Lines
- Reference Line Lease Boundary Creek or Drain
- WV County Route WV State Route

FILE NO:

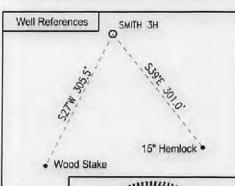
SMITH PAD

SMITH 3H O O SMITH 5H

SMITH 1H O O SMITH 7H

SMITH 2H O O SMITH 8H

SMITH 4H O O SMITH 6H



1" = 200'

Bridgeport, WV 26330



i. the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

w c. Smo LLS L. L. S. 687

MAS C. MICENSON No. 687 STATE OF VIRGIN AND SURVEYOR THE

W2032 (BK 49-6) DRAWING NO: SCALE: 1" = 1000" MINIMUM DEGREE OF ACCURACY: 1:2500

Bridgeport, WV 26330

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

A MERY

1	DATE: _	FEB	RUARY 22	_ 20		18
0	PERATO	DRS V	WELL NO: _	SM	ITH	зн
		AF	I WELL	NO		
-	47	-	103	-	02	905
	STATE		COLINITY		DE	DANT

PROVEN SOURCE OF ELEVATION: NGS CORS Station	AND GAS DIVISION	47 - 103 - 02905 STATE COUNTY PERMIT
WELL TYPE: ☐ OIL ☐ GAS ☐ LIQUID INJECT (IF GAS) PRODUCTION: ☐ STORAL LOCATION ELEVATION: 1,335' WATERSHE DISTRICT: Magnolia	AGE DEEP SHALLOW	DRANGLE: NEW MARTINSVILLE 7.5'
SURFACE OWNER: Charlotte Smith	COUNTY, WEIZE	ACREAGE: 38.9 ±
ROYALTY OWNER: Charlotte Smith, ET AL	LEASE NO: 873632	ACREAGE: 76.4 ±
	LL DEEPER STRACTURE OR STIMUL	
	HYSICAL CHANGE IN WELL (SPECIFY)	
☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG	G TARGET FORMATION: Marcel	llus ESTIMATED DEPTH: 6,740'
WELL OPERATOR: EQT Production Company	DESIGNATED AGENT:Jason	n Ranson
ADDRESS: 115 Professional Place PO Box 280	ADDRESS: 115 Pr	Professional Place PO Box 280

WW-6A1 (5/13) Operator's Well No. SMITH 3H

#### INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Various	Stone Energy Corp.	EQT Production Company	**	183A/305

\*\* Per West Virginia Code Section 22-5-8

#### Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:	EQT Production Company
By:	Victoria J Roark
Its:	Regional Land Supervisor

1020290S

# INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

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(2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Number Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
8-5-11	Schupbach Valley Motors	Stone Energy Corp	1/8	112A/390
8-5-10	Sherman Richter	Stone Energy Corp	1/8	122A/832
8-5-10	Herman L Richter	Stone Energy Corp	1/8	122A/834
8-5-10	Piney Holdings	Stone Energy Corp	1/8	122A/818
8-5-10	<b>Betty Lou Goff</b>	Stone Energy Cor	1/8	3/198
8-5-10	Robin M. King	Stone Energy Corp	1/8	124A/943

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The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:

By

RECEIVEDIts:
Office of Oil and Gas

MAR 1 3 2018

WV Department of Environmental Protection STONE ENERGY CORPORATION

Land Coordinator

Operator	e Marall		L
Operator	s well	Num	per:

Smith 3H

#### INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Map/Parcel
Robin M. King	Stone Energy Corporation	1/8	124A/943	8-5-10
Kim Allan Vance	Stone Energy Corporation	1/8	124A/945	8-5-10
Sandra Lee Wright	Stone Energy Corporation	1/8	124A/947	8-5-10
Michael Lee Greathouse	Stone Energy Corporation	1/8	124A/949	8-5-10
Clifford Bruce Kauff	Stone Energy Corporation	1/8	124A/951	8-5-10
Lana Jean Frame	Stone Energy Corporation	1/8	124A/953	8-5-10
Henry K. Bivens	Stone Energy Corporation	1/8	124A/520	8-5-10
Mariann Cutlip	Stone Energy Corporation	1/8	124A/518	8-5-10
Edward C. Cody	Stone Energy Corporation	1/8	124A/516	8-5-10
Kathyryn L. Brown	Stone Energy Corporation	1/8	125A/388	8-5-10
Betty H. Bohoney	Stone Energy Corporation	1/8	125A/390	8-5-10
Curtis Eugene Joy, Jr.	Stone Energy Corporation	1/8	125A/392	8-5-10
Jeanette Ann Hafley	Stone Energy Corporation	1/8	125A/394	8-5-10
Eric Lane Allan	Stone Energy Corporation	1/8	126A/331	8-5-10
Leah E. Chapman Trust	Stone Energy Corporation	1/8	126A/714	8-5-10
Gordon Taiclet	Stone Energy Corporation	1/8	126A/717	8-5-10
Gary Melvin Hafely	Stone Energy Corporation	1/8	126A/712	8-5-10
Carol A. Domingo	Stone Energy Corporation	1/8	125A/855	8-5-10
Elizabeth F. Fitchet	Stone Energy Corporation	1/8	126A/333	8-5-10
Hafely Heirs, LLC	Stone Energy Corporation	1/8	126A/730	8-5-10
Lois Poort, et ux	Stone Energy Corporation	1/8	126A/732	8-5-10
Betty June Hafley Miller, et vir	Stone Energy Corporation	1/8	127/215	8-5-10
John William Burton	Stone Energy Corporation	1/8	114A/713	8-5-31
Lyman B. Waterman, Jr.	Stone Energy Corporation	1/8	131A/696	8-5-31
Sherrell Lee Lallathin	Stone Energy Corporation	1/8	137A/332	8-5-31
Mary Martha Young	Stone Energy Corporation	1/8	39/105	8-5-31
Lisa Hoyt	Stone Energy Corporation	1/8	39/105	8-5-31
Joseph M. Young	Stone Energy Corporation	1/8	39/105	8-5-31
Lois J Hornbrook	Stone Energy Corporation	1/8	39/105	8-5-31
Terry L. Schupbach	Stone Energy Corporation	1/8	39/105	8-5-31
Paul Nieratko Jr	Stone Energy Corporation	1/8	39/105	8-5-31
Charles Menkel	Stone Energy Corporation	1/8	39/105	8-5-31
James Young	Stone Energy Corporation	1/8	39/105	8-5-31
Charles L. McGowen, Jr., et ux	Stone Energy Corporation	1/8	88A/305	8-8-3
Lawrence E. Zumpetta, et ux	Stone Energy Corporation	1/8	88A/309	8-8-3
John C. Bober, III, et ux	Stone Energy Corporation	1/8	88A/313	8-8-3
David T. Griffith	Stone Energy Corporation	1/8	88A/317	8-8-3
Jay H. Renner	Stone Energy Corporation	1/8	89A/93	8-8-3
B&R Construction	Stone Energy Corporation	1/8	112A/416	8-8-3

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that

I am the person who signed the Notice and Application for the Applicant, and that -

(1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

(2) the parties and recordation data (If recorded) for lease(s) or other continuing contract(s) by which the

Applicant claims the right to extract, produce or market the oil or gas are as follows:

RECEIVED

Office of Oil and Gawell Operator Stone Energy Corporation

MAR 1 3 2018

Title Land Coordinator

WV Department of Environmental Protection Office of Oil & Gas

perator's Well Number:	Smith 3H

# INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Map/Parcel
Lynn Ann McCray	Stone Energy Corporation	1/8	129A/620	8-8-3
Sonny Smith	Stone Energy Corporation	1/8	111A/982	8-8-5
The Heaven Partnership	Stone Energy Corporation	1/8	116A/948	8-5-24
Karen Miller	Stone Energy Corporation	1/8	129A/228	8-5-25
Gary C. Kirkhart	Stone Energy Corporation	1/8	129A/225	8-5-25
Ronald Kirkhart	Stone Energy Corporation	1/8	214/429	8-5-25
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I am the person who signed the Notice an	d Annileation fo	r tha Annlicant and t	hot	

(2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicact claims the right to extract, produce or market the oil or gas are as follows:

Office of Oil and	Well Operator Stone Energy Co	rporation
-------------------	-------------------------------	-----------

MAR 13 2018

Title Land Coordinator

WV Department of Environmental Protection

<sup>(1)</sup> the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

### 4710302905



September 13, 2017

Mr. James Martin West Virginia Department of Environmental Protection Office of Oil and Gas 601 57th Street SE Charleston, WV 25304

Re: Smith 3H

Magnolia District, Wetzel County

Dear Mr. Martin,

EQT Production Company is submitting an application for a new well work permit for the above well number. Upon information and belief, Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely

Vicki Roark

Permitting Supervisor-WV

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION

Date of Notic	ce Certification: 9/21/17	API	No. 47- 103 - 02	905
Man section	1//-		ator's Well No. SMI	TH 3H
			Pad Name: SMITH	
Notice has l				
	ne provisions in West Virginia Code tract of land as follows:	22-6A, the Operator has provided	the required parties	with the Notice Forms listed
State:	w	East	ng: 516226.57	
County:	Wetzel		hing: 4388548.06	
District:	Magnolia	Public Road Access:	Wetzel County F	Route 22
Quadrangle:	New Martinsville	Generally used farm na	ame: Smith, Sonny &	Charlotte
Watershed:	Tributary of of Doolin Run			
information r of giving the requirements Virginia Code	ed the owners of the surface descril equired by subsections (b) and (c), se surface owner notice of entry to su of subsection (b), section sixteen o e § 22-6A-11(b), the applicant shall t have been completed by the applican	ction sixteen of this article; (ii) that rvey pursuant to subsection (a), see f this article were waived in writi ander proof of and certify to the sec	the requirement was ection ten of this art ng by the surface or	s deemed satisfied as a result icle six-a; or (iii) the notice wner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Oprator has properly served the require ECK ALL THAT APPLY		otice Certification	OOG OFFICE USE ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED B SEISMIC ACTIVITY WAS CON		☐ RECEIVED/ NOT REQUIRED
☐ 2. NO	FICE OF ENTRY FOR PLAT SURV	EY or 🔳 NO PLAT SURVEY W	AS CONDUCTED	☐ RECEIVED
■ 3, NO	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRED IN NOTICE OF ENTRY FOR PLAT WAS CONDUCTED or		RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY SE (PLEASE ATTACH)	URFACE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION			RECEIVED
■ 5. PUE	BLIC NOTICE			RECEIVED
■ 6. NO	TICE OF APPLICATION			RECEIVED

#### Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

THEREFORE, I have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that at required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

 Well Operator:
 EQT Production Company
 Address:
 115 Professional Place PO Box 280

 By:
 Victoria J Roark
 Bridgeport WV 26330

 Its:
 Regional Land Supervisor
 Facsimile:
 304-848-0041

 Telephone:
 304-848-0076
 Email:
 vroark@eqt.com



Subscribed and sworn before me this 21 day of September 2017.

Relucca & Wanstreet No

My Commission Expires 4-7-2020

#### Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at <a href="deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.

API NO. 47- 103 - 02905
OPERATOR WELL NO. SMITH 3H
Well Pad Name: SMITH

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no la	ter than the filing date of permit application.
Date of Notice: 2/2/17 Date Permit Application Filed Notice of:	a.9/21/17
그렇게 그렇게요 하는 사람이에서 어머니?	F APPROVAL FOR THE N OF AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-	6A-10(b)
	METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
registered mail or by any method of delivery that requires a re- sediment control plan required by section seven of this article the surface of the tract on which the well is or is proposed to loil and gas leasehold being developed by the proposed well we described in the erosion and sediment control plan submitted operator or lessee, in the event the tract of land on which the well work, if the surface tract is to be used for the placement, impoundment or pit as described in section nine of this article have a water well, spring or water supply source located within provide water for consumption by humans or domestic animal proposed well work activity is to take place. (c)(1) If more that subsection (b) of this section hold interests in the lands, the ap- records of the sheriff required to be maintained pursuant to se- provision of this article to the contrary, notice to a lien holder	to repit as required by this article shall deliver, by personal service or by sceipt or signature confirmation, copies of the application, the erosion and a part and the well plat to each of the following persons: (1) The owners of record of the located; (2) The owners of record of the surface tract or tracts overlying the work, if the surface tract is to be used for roads or other land disturbance as pursuant to subsection (c), section seven of this article; (3) The coal owner, well proposed to be drilled is located [sic] is known to be underlain by one or too tracts overlying the oil and gas leasehold being developed by the proposed construction, enlargement, alteration, repair, removal or abandonment of any e; (5) Any surface owner or water purveyor who is known to the applicant to in one thousand five hundred feet of the center of the well pad which is used to ls; and (6) The operator of any natural gas storage tield within which the an three tenants in common or other co-owners of interests described in applicant may serve the documents required upon the person described in the petion eight, article one, chapter eleven-a of this code. (2) Notwithstanding any is not notice to a landowner, unless the lien holder is the landowner. W. Va. also provide the Well Site Safety Plan ("WSSP") to the surface owner and any esting as provided in section 15 of this rule.
☐ Application Notice ☐ WSSP Notice ☐ E&S Plan N	Notice Well Plat Notice is hereby provided to:
SURFACE OWNER(s)	□ COAL OWNER OR LESSEE
Name: See Attached	Name: see attached
Address:	Address:
Name:	COAL OPERATOR
Address:	Name:
	Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)	
Name: See Attached	☐ SURFACE OWNER OF WATER WELL
Address:	AND/OR WATER PURVEYOR(s)
Value of the second sec	Name:
Name:	Address:
Address:	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
☑ SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name: See Attached	Address:
Address:	77.391.573.0
	*Please attach additional forms if necessary

WW-6A (8-13) API NO. 47- 103 - 02905

OPERATOR WELL NO. SMITH 3H

Well Pad Name: SMITH

#### Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

#### This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <a href="https://www.dep.wv.gov/oil-and-gas/pages/default.aspx">www.dep.wv.gov/oil-and-gas/pages/default.aspx</a>.

#### **Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

WW-6A (8-13)

API NO. 47- 103 - 02905

OPERATOR WELL NO. SMITH 3H

Well Pad Name: SMITH

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

#### Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

#### Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

#### Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

#### Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57<sup>th</sup> St. SE
Charleston, WV 25304
(304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WW-6A (8-13) API NO. 47- 103 - 02905

OPERATOR WELL NO. SMITH 3H

Well Pad Name: SMITH

#### Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have THIRTY (30) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

#### **Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

#### **Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

WW-6A (8-13)

API NO. 47- 103 - 02905

OPERATOR WELL NO. SMITH 3H

Well Pad Name: SMITH

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 304-848-0076

Email: vroark@eqt.com

Address: 115 Professional Place PO Box 280

Bridgeport WV 26330

Facsimile: 304-848-0041

#### Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>.

OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA REBECCA L. WANSTREET EQT PRODUCTION COMPANY PO BOX 250
BRIDGEPORT, WY 26330
My commission expires April 07, 2020

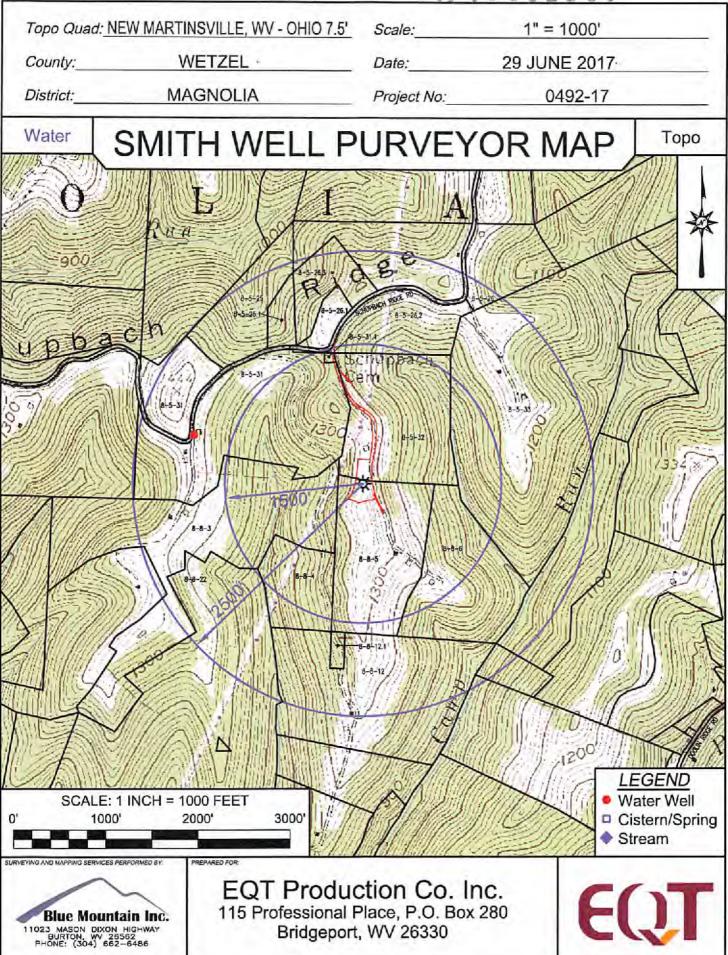
Subscribed and sworn before the this 2 ( day of September 2017.

My Commission Expires 4-7-2020

Surface Owners, Surface Owners (road or other disturbance), Surface Owners (AST) and Coal:



Charlotte Smith 440 Farm Road New Martinsville WV 26155



Date of Notice: 09/12/2017

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Date Permit Application Filed: 09/22/2017

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to filing a permit application.

Delivery met	thod pursuant to West Virginia Code § 2	2-6A-16(b)	
1	/	2-0:4-10(5)	
✓ HAND	CERTIFIED MAIL		
DELIVE	RETURN RECEIPT REQ	UESTED	
receipt request drilling a hore of this subsect subsection ma	V. Va. Code § 22-6A-16(b), at least ten day sted or hand delivery, give the surface own izontal well: <i>Provided</i> , That notice given tion as of the date the notice was provided ay be waived in writing by the surface own le, facsimile number and electronic mail ac	er notice of its intent to enter upon the pursuant to subsection (a), section to to the surface owner: <i>Provided, hower.</i> The notice, if required, shall include:	he surface owner's land for the purpose of en of this article satisfies the requirements wever. That the notice requirements of this lude the name, address, telephone number.
Notice is he	reby provided to the SURFAÇE OW	NER(s):	
Name: Charlotte	e Smith	Name:	
Address: 440   New Martinsville,	#	Address:	
	Vest Virginia Code § 22-6A-16(b), notice is vner's land for the purpose of drilling a hor www.  Wetzel  Magnolia  New Martinsville  Tributary of of Doolin Run		
Pursuant to V facsimile nun related to hor located at 601	Shall Include: West Virginia Code § 22-6A-16(b), this in the and electronic mail address of the orizontal drilling may be obtained from the 57th Street, SE, Charleston, WV 25304 (3) reby given by:	perator and the operator's authorize Secretary, at the WV Department of	ed representative. Additional information of Environmental Protection headquarters
	r: EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place PO Box 280	Address:	115 Professional Place PO Box 280
Bridgeport WV 20	6330	Bridgeport WV 26330	
Telephone:	304-848-0076	Telephone:	304-848-0076
Email:	vroark@eqt.com	Email:	vroark@eqt.com
Facsimile:	304-848-0041	Facsimile:	304-848-0041
	s Privacy Notice: Oil and Gas processes your personal infor	mation such as name, address and to	alaphone number, as part of our regulator

duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact

DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Surface Owners, Surface Owners (road or other disturbance), Surface Owners (AST) and Coal:

Charlotte Smith 440 Farm Road New Martinsville WV 26155

4710302905

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

## **WAIVER**

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*. That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided*, *however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Surface Own		at I have read the notice pro	visions liste	i above and hereby waive the
notice require	ments under West Virginia Code	§ 22-6A-16(b) for the tract	of land as fo	Hows:
State:	w	F 10004 ( ) 1 / m . n .	Easting:	516226 57
County:	Wetzel	UTM NAD 83	Northing:	4388548 06
District:	Magnolia	Public Road Acc		Wetzel County Route 22
Quadrangle:	New Martinsville	Generally used f		Smith, Sonny & Charlotte
Watershed:	Tributary of of Doclin Run			
Name: Charlott		Signature: /	Spark	lotte L. Sman pt. 2017
Address: 440 F	arm Road		1 2	
New Martinsville,	WV 26155	Date:	14 X	pt. 2017

#### Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacy officer awv.gov.

Operator Well No. SMITH 3H

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

		nit Application Filed:	-1	
Delivery me	thod pursuant to West Virginia Co	de § 22-6A-16(c)		
■ CERTI	IFIED MAIL	☐ HAND		
	RN RECEIPT REQUESTED	DELIVERY		
return receip the planned required to b drilling of a damages to tl (d) The notice of notice.	t requested or hand delivery, give the operation. The notice required by the provided by subsection (b), section horizontal well; and (3) A proposed the surface affected by oil and gas open.	e surface owner whose land this subsection shall incluten of this article to a surface use and compenerations to the extent the diven to the surface owner WNER(s)	d will be used for de: (1) A copy ace owner whose sation agreement amages are comp	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information is land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
Name: See Atta		Name:		
Address:		Addres	s:	
	Vant Vindada Cada con CA 166-1 an	ation to book out on about	barra danatana da	
operation on State:	the surface owner's land for the purp		nl well on the tra Easting:	516226.57
operation on State: County:	the surface owner's land for the purp ww Wetzel	oose of drilling a horizont: UTM NAD	al well on the tra  Easting:  Northing:	ct of land as follows: 516226.57 4388548.06
operation on State: County: District:	the surface owner's land for the purp	oose of drilling a horizont:  UTM NAD 3  Public Road	al well on the tra Easting: Northing: Access:	ct of land as follows: 516226.57
	the surface owner's land for the purp  W  Wetzel  Magnolia	oose of drilling a horizont:  UTM NAD 3  Public Road	al well on the tra  Easting:  Northing:	ct of land as follows: 516228.57 4388548.06 Wetzel County Route 22
operation on State: County: District: Quadrangle: Watershed: This Notice: Pursuant to V to be providenorizontal was surface affectinformation of	the surface owner's land for the purp  W  Wetzel  Magnolia  New Martinsville  Tributary of of Doolin Run  Shall Include:  West Virginia Code § 22-6A-16(c), the deby W. Va. Code § 22-6A-10(b) ell; and (3) A proposed surface use a sted by oil and gas operations to the related to horizontal drilling may be, located at 601 57th Street, SE,	Dose of drilling a horizonta  UTM NAD S  Public Road  Generally us  his notice shall include: (1 to a surface owner whos and compensation agreement extent the damages are contained from the Secretary and the secretary of the se	Access: ed farm name:  Acopy of this e land will be unt containing anompensable und tary, at the WV	ct of land as follows: 516228.57 4388548.06 Wetzel County Route 22
operation on State: County: District: Quadrangle: Watershed: This Notice: Pursuant to Vito be provide norizontal wasurface affect information of headquarters, gas/pages/de	www Wetzel Magnolia New Martinsville Tributary of of Doolin Run  Shall Include: West Virginia Code § 22-6A-16(c), the downward of the surface use a steed by oil and gas operations to the related to horizontal drilling may be a located at 601 57th Street, SE, fault.aspx.	Dose of drilling a horizonta  UTM NAD a  Public Road Generally us  In a surface owner whos and compensation agreement extent the damages are of the obtained from the Secret Charleston, WV 25304	A copy of this e land will be und containing an ompensable und tary, at the WV (304-926-0450)	ct of land as follows:  516226.57  4388548.06  Wetzel County Route 22  Smith, Sonny & Charlotte  code section; (2) The information required used in conjunction with the drilling of a coffer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-
operation on State: County: District: Quadrangle: Watershed: This Notice: Pursuant to V to be providencizontal we surface affect information in	www Wetzel Magnolia New Martinsville Tributary of of Doolin Run  Shall Include: West Virginia Code § 22-6A-16(c), the downward of the surface use a steed by oil and gas operations to the related to horizontal drilling may be a located at 601 57th Street, SE, fault.aspx.	Dose of drilling a horizonta  UTM NAD S  Public Road  Generally us  his notice shall include: (1 to a surface owner whos and compensation agreement extent the damages are contained from the Secretary and the secretary of the se	Access: ed farm name:  Acopy of this e land will be unt containing anompensable und tary, at the WV	ct of land as follows:  516228.57  4388548.06  Wetzel County Route 22  Smith, Sonny & Charlotte  code section; (2) The information required used in conjunction with the drilling of a coffer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-

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Surface Owners, Surface Owners (road or other disturbance), Surface Owners (AST) and Coal:

Charlotte Smith 440 Farm Road New Martinsville WV 26155

4710302905

#### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Jim Justice Governor 1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

July 26, 2017

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57<sup>th</sup> Street, SE Charleston, WV 25304

Subject: DOH Permit for the Smith Pad, Wetzel County 47-103-02905 F

Smith 1H Smith 2H Smith 3H Smith 4H

Smith 5H Smith 6H Smith 8H

Dear Mr. Martin,

This well site will be accessed from an encroachment permit 06-2013-0010 to be transferred EQT Production Company for access to the State Road for a well site located off of Wetzel County Route 22 SLS. This permit must be approved by the DOH before construction is begun.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

**EQT Production Company** 

CH, OM, D-6

File

# Anticipated Frac Additives Chemical Names and CAS numbers

<u>Material</u>	Ingredient	CAS Number
Water ·		
Sand	Hydrotreated light petroleum distillate Tributyl tetradecyl phosphonium	14808-60-7
Friction Reducer	chloride	64742-47-8
Biocide	Ammonium chloride	81741-28-8
Scale Inhibitor	Hydrochloric Acid	12125-02-9
15% Hydrochloric Acid	Propargyl Alcohol	7647-01-0
Corrosion Inhibitor	Methanol	107-19-7
Corrosion Inhibitor	Guar Gum	67-56-1
Gelling Agent	Sodium Persulfate	9000-30-0
Oxidizing Breaker	Potassium Carbonate	7775-27-1
Buffering Agent		584-08-7

DMA 107-17

RECEIVED
Office of Oil and Gas

GCT 11 2017



LOCATION MAP

#### SITE LOCATION

THE PROJECT IS LOCATED AT 59,6505ID. -80,81220I (NAD83 WVN). THE CODGINATIS ARE REFERENCED FROM THE PAD ENTRANCE AND CAN BE LOCATED BY TAKING BOOKIN RIGHT ROOF ROAD ONE HILE EAST FROM NEW MARTINSYLLE. THAN LEFT ONTO SCHUMPACH ROOF AND TRAVEL APPROXIMATELY 2.6 MILES AND THE PAD ENTRANCE WILL DO NO THE ROGHT.

#### FLOODPLAIN NOTE

THE PROPOSED LIMITS OF DISTURBANCE FOR THIS PROJECT ARE NOT LOCATED IN A FLOOD ZONE, PER THE FLOOD INSURANCE RATE MAP (FIRM) NUMBER \$405100255

#### WVDEP OOG ACCEPTED AS-BUILT VD. 9/13/2017

SHEET INDEX		
PG	DRAWING NAME	
1	COVER SHEET	
2	GENERAL DETAILS #1	
3	GENERAL DETAILS #2	
1.	EXISTING SITE PLAN	
5	OVERALL SITE FLAN	
6	OVERALL PROPOSED SITE PLAN W/ ORTHO	
7	DETAIL SITE PLAN #1	
8	PROFILES	
9	CONSTRUCTION DETAILS	

# EQT

Office of Oil and Gas

## **SMITH WELL SITE**

#### ENTRANCE OF SITE

NAD 83 - LAT: N 39.650510°; LONG: W 80.812201° NAD 27 - LAT: N 39.650432°; LONG: W 80.812381° UTM (NAD83) - N: 4388985.269; E: 516111.897

#### CENTER OF WELL PAD LOCATION

NAD 83 - LAT: N 39.646617°; LONG: W 80.810879° NAD 27 - LAT: N 39.646539°; LONG: W 80.811059° UTM (NAD83) - N: 4388553.447; E: 516226.226

MAGNOLIA DISTRICT
WETZEL COUNTY, WEST VIRGINIA
DATE: JUNE 1, 2017

### Blue Mountain Inc.

Engineers and Land Surveyors Woman Owned Small Business 10125 Mason Dixon Hwy, Burton, WV 26562-9656 (304) 662-6486

NOTE: DRAWING WAS CREATED ON 22X34 PAPER, IIXI7 DRAWINGS ARE HALF SCALE, REFER TO SCALE BAR FOR PROPER SCALING WV Department of Environmental Protection



LOCATION MAP

#### PROPERTY OWNERS

I. SMITH SONNY L & CHARLOTTE 08-08-05 2. SCHUPBACH GEORGE S 08-05-52



Know what's below. Call before you dig. Blue Mountain Inc Enguere and Land Serveror House One Mond Academ 1925 April 1920 Serveror

PROFESSIONAL PLACE SSHOWAL BUILDING FOUR IDGEPORT, WY 26550

SMITH WELL SITE



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SHEET NO. I

